NOAA-NWS and Partners Midwest and Great Plains Drought Update Webinar

Mark Svoboda

National Drought Mitigation Center
School of Natural Resources
University of Nebraska-Lincoln

NOAA-NWS CR Webinar Series, September 6, 2012
General Information

* Providing climate services to the Central Region
  * Collaboration with Dennis Todey (South Dakota State Climatologist), Doug Kluck (NOAA - RCSD) and John Eise (Climate Service Program Manager), State Climatologists and the Midwest Regional Climate Center, High Plains Regional Climate Center, NOAA’s Climate Prediction Center, Iowa State University, and the National Drought Mitigation Center

* Next Climate/Drought Outlook Webinar
* Access to Climate/Drought Webinars and information
  * http://mrcc.isws.illinois.edu/webinars.htm
  * http://www.hprcc.unl.edu

* Operator Assistance for questions at the end
Agenda

- Current Conditions
- Outlooks
- Drought Impacts
- Questions/Comments
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://droughtmonitor.unl.edu/
## Drought Condition (Percent Area): United States

Conditions for the U.S., including Alaska, Hawaii and Puerto Rico

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>None</th>
<th>D0-D4</th>
<th>D1-D4</th>
<th>D2-D4</th>
<th>D3-D4</th>
<th>D4</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Year Ago</td>
<td>08/30/11</td>
<td>59.26</td>
<td>40.74</td>
<td>27.51</td>
<td>20.68</td>
<td>15.26</td>
<td>9.37</td>
</tr>
<tr>
<td>Start of Water Year</td>
<td>09/27/11</td>
<td>63.45</td>
<td>36.55</td>
<td>24.42</td>
<td>19.61</td>
<td>14.87</td>
<td>9.50</td>
</tr>
<tr>
<td>Start of Calendar Year</td>
<td>12/27/11</td>
<td>58.88</td>
<td>41.12</td>
<td>23.89</td>
<td>15.88</td>
<td>8.37</td>
<td>2.76</td>
</tr>
<tr>
<td>3 Months Ago</td>
<td>06/05/12</td>
<td>46.40</td>
<td>53.60</td>
<td>32.33</td>
<td>15.85</td>
<td>3.86</td>
<td>0.50</td>
</tr>
<tr>
<td>Last Week</td>
<td>09/28/12</td>
<td>30.19</td>
<td>69.81</td>
<td>52.63</td>
<td>35.42</td>
<td>19.38</td>
<td>5.05</td>
</tr>
<tr>
<td>Current</td>
<td>09/04/12</td>
<td>30.37</td>
<td>69.63</td>
<td>53.06</td>
<td>35.53</td>
<td>17.93</td>
<td>5.13</td>
</tr>
</tbody>
</table>

## Conditions for the Contiguous U.S.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>None</th>
<th>D0-D4</th>
<th>D1-D4</th>
<th>D2-D4</th>
<th>D3-D4</th>
<th>D4</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Year Ago</td>
<td>08/30/11</td>
<td>54.07</td>
<td>45.93</td>
<td>32.83</td>
<td>24.75</td>
<td>18.27</td>
<td>11.21</td>
</tr>
<tr>
<td>Start of Water Year</td>
<td>09/27/11</td>
<td>56.45</td>
<td>43.55</td>
<td>29.13</td>
<td>23.44</td>
<td>17.80</td>
<td>11.37</td>
</tr>
<tr>
<td>Start of Calendar Year</td>
<td>12/27/11</td>
<td>50.89</td>
<td>49.11</td>
<td>28.49</td>
<td>18.95</td>
<td>10.01</td>
<td>3.31</td>
</tr>
<tr>
<td>3 Months Ago</td>
<td>06/05/12</td>
<td>36.01</td>
<td>63.99</td>
<td>38.60</td>
<td>18.92</td>
<td>4.60</td>
<td>0.60</td>
</tr>
<tr>
<td>Last Week</td>
<td>08/28/12</td>
<td>22.31</td>
<td>77.69</td>
<td>62.89</td>
<td>42.34</td>
<td>23.18</td>
<td>6.04</td>
</tr>
<tr>
<td>Current</td>
<td>09/04/12</td>
<td>22.54</td>
<td>77.46</td>
<td>63.39</td>
<td>42.48</td>
<td>21.45</td>
<td>6.14</td>
</tr>
</tbody>
</table>

National Drought Mitigation Center
### Drought Conditions (Percent Area)

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>D0 - D4</th>
<th>D1 - D4</th>
<th>D2 - D4</th>
<th>D3 - D4</th>
<th>D4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>6.26</td>
<td>93.74</td>
<td>77.74</td>
<td>63.66</td>
<td>37.83</td>
<td>12.86</td>
</tr>
<tr>
<td>Last Week</td>
<td>9.37</td>
<td>90.63</td>
<td>76.84</td>
<td>64.69</td>
<td>43.80</td>
<td>11.07</td>
</tr>
<tr>
<td>(8/28/2012)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Months Ago</td>
<td>37.96</td>
<td>62.04</td>
<td>24.66</td>
<td>5.58</td>
<td>1.15</td>
<td>0.00</td>
</tr>
<tr>
<td>(6/5/2012)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Year Ago</td>
<td>62.24</td>
<td>37.76</td>
<td>16.71</td>
<td>9.07</td>
<td>3.50</td>
<td>1.58</td>
</tr>
<tr>
<td>(9/6/2011)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Intensity:**
- Yellow: D0 - Abnormally Dry
- Light Orange: D1 - Drought Moderate
- Orange: D2 - Drought Severe
- Red: D3 - Drought Extreme
- Maroon: D4 - Drought Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

[http://droughtmonitor.unl.edu](http://droughtmonitor.unl.edu)

Released Thursday, September 6, 2012
Brian Fuchs, National Drought Mitigation Center
CONUS + Puerto Rico: Current 7-Day Observed Precipitation
Valid at 9/5/2012 1200 UTC- Created 9/5/12 19:38 UTC
90 Day ACIS Departure from Normal and % of Normal

Departure from Normal Precipitation (in)
6/8/2012 - 9/5/2012

Percent of Normal Precipitation (%)
6/8/2012 - 9/5/2012

Generated 9/6/2012 at HPRCC using provisional data.
90 Day SPI
6/8/2012 - 9/5/2012

Generated 9/6/2012 at HPRCC using provisional data.

Regional Climate Centers
Growing Season ACIS
Departure from Normal

Departure from Normal Precipitation (in)
4/1/2012 – 9/5/2012

Generated 9/6/2012 at HPRCC using provisional data.
Growing Season ACIS Percent of Normal

Percent of Normal Precipitation (%)
4/1/2012 - 9/5/2012
Year-to-date SPI
1/1/2012 - 9/5/2012

Generated 9/6/2012 at HPRCC using provisional data.
Regional Climate Centers
CPC 8-14-Day Outlooks: Valid September 13-19, 2012
Early-Sep CPC/IRI Consensus Probabilistic ENSO Forecast

ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: −0.45°C to 0.45°C

Climatological Probability:
- Red: El Niño
- Green: Neutral
- Blue: La Niña

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Probability (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASO 2012</td>
<td></td>
</tr>
<tr>
<td>SON</td>
<td></td>
</tr>
<tr>
<td>OND</td>
<td></td>
</tr>
<tr>
<td>NDJ</td>
<td></td>
</tr>
<tr>
<td>DJF</td>
<td></td>
</tr>
<tr>
<td>JFM</td>
<td></td>
</tr>
<tr>
<td>FMA</td>
<td></td>
</tr>
<tr>
<td>MAM</td>
<td></td>
</tr>
<tr>
<td>AMJ 2013</td>
<td></td>
</tr>
</tbody>
</table>
U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for September 6 - November 30, 2012
Released September 6, 2012

**KEY:**
- **Drought to persist or intensify**
- **Drought ongoing, some improvement**
- **Drought likely to improve, impacts ease**
- **Drought development likely**

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events such as individual storms cannot be accurately forecast more than a few days in advance. Use caution for applications such as crops that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.
Voluntarily Reported Drought Impacts

Volunteer-submitted reports,
January - August 2012

Reports for each month of 2012 (through August) submitted by volunteers to the Drought Impact Reporter
On July 11, USDA’s World Agricultural Outlook Board cut the estimate for the 2012 U.S. corn crop by 1.82 billion bushels. The 12% cut left the projected U.S. corn production at 12.97 billion bushels.

On August 10, 2012 USDA/WAOB adjusted the crops down again by 2.17 billion bushels (16.7%):

**Corn:** 123.4 bushels/acre (10.8 billion bushels),
down from 146.0 in July and 166.0 in June.

**Soybeans:** 36.1 bushels/acre (83.4 million tons),
down from 40.5 in July and 43.9 in June.
Further Information

Today’s Recorded Presentation:

• [http://mrcc.isws.illinois.edu/webinars.htm http://www.hprcc.unl.edu]

• NOAA’s National Climatic Data Center: [www.ncdc.noaa.gov]
  ➢ Monthly climate reports (U.S. & Global): [www.ncdc.noaa.gov/sotc/]

• NOAA’s Climate Prediction Center: [www.cpc.ncep.noaa.gov]

• Climate Portal: [www.climate.gov]

• U.S. Drought Monitor: [www.droughtmonitor.unl.edu]

• National Drought Mitigation Center: [www.drought.unl.edu]

• Drought Impact Reporter: [www.droughtreporter.unl.edu]

• NIDIS Drought Portal: [www.drought.gov]

• State climatologists

• Regional climate centers
  – [http://mrcc.isws.illinois.edu]
  – [http://www.hprcc.unl.edu]
Contact Information:

Mark Svoboda
msvoboda2@unl.edu
402-472-8238

National Drought Mitigation Center
School of Natural Resources
University of Nebraska-Lincoln